

# INSTALLATION & OPERATION MANUAL

# ECO SERIES ELECTRIC CONVECTION OVENS

#### MODEL

ECO46	MI FOFO1
ECO4S	ML-52501
ECO4D	ML-52502
ECO4C	ML-52503
ECO6D	ML-52504
ECO6C	ML-52505



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# Installation, Operation And Care Of ECO SERIES ELECTRIC CONVECTION OVENS

# **KEEP THESE INSTRUCTIONS FOR FUTURE USE**

Your Vulcan Electric Convection Oven is produced with quality workmanship and material. Proper installation, usage and maintenance of your oven will result in many years of satisfactory performance.

The manufacturer suggests that you thoroughly read this entire manual and carefully follow all of the instructions provided.

# **GENERAL**

The Model ECO Series Convection Ovens feature a 500°F thermostat, timer, porcelain interior, and a 2-speed, ½ H.P. blower motor as standard equipment. Each oven is provided with a standard 208 or 240 volt, 60 Hz, and 1- or 3-phase electrical service. A 480 volt electrical service is available optionally. The oven doors open independently.

The ECO Series Oven is a single cavity oven. It is furnished with five racks. An open stand with lower storage rack is available as an option.

Stacked ovens are furnished with a stacking kit for mounting one oven on top of the other.

Features of the models are shown below:

MODEL	OVEN STYLE	THERMOSTAT (Each Oven)	TIMER (Each Oven)	ROAST & HOLD OPTION	GENTLE BAKE
ECO4S	Std. Depth	Mechanical	1-Hour Dial		
ECO4D	Std. Depth	Solid State	1-Hour Dial		
ECO4C	Std. Depth	Electronic	Electronic	Х	Х
ECO6D	Deep Depth	Solid State	1-Hour Dial		
ECO6C	Deep Depth	Electronic	Electronic	Х	Х

Additional racks are available as accessories.

# INSTALLATION

#### **UNPACKING**

Immediately after unpacking the oven, check for possible shipping damage. If this oven is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Prior to installation, verify that the electrical service agrees with the specifications on the oven data plate, located on the inside of the bottom front cover.

Do not use the doors or their handles to lift the oven.

#### **LOCATION**

The installation location must allow adequate clearances for servicing and proper operation.

#### INSTALLATION CODES AND STANDARDS

Vulcan ovens must be installed in accordance with:

#### In the United States of America:

- 1. State and local codes.
- 2. ANSI/NFPA 96, "Vapor Removal from Cooking Equipment" (latest edition), available from National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.
- 3. National Electrical Code, ANSI/NFPA-70 (latest edition).

#### In Canada:

- 1. Local codes.
- 2. Canadian Electrical Code CSA Standard C22.2 No. 3 (latest edition), "Electrical Features of Fuel Burning Equipment."

#### **INSTALLING BASIC OVEN**

The basic oven must be installed on legs or be mounted on a modular stand. Installations on concrete bases or other supports restricting air circulation underneath the oven is not advisable and may void the warranty. If using the modular stand, set the oven on the stand after unpacking.

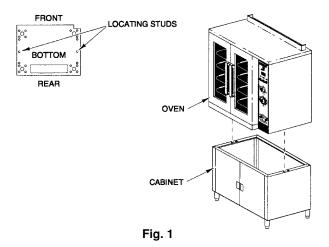
#### Assembling the Legs to the Oven

- 1. Unpack the oven and leg set.
- 2. Position oven on its back, taking care not to scratch or damage it.
- 3. Attach each of the four leg assemblies to bottom of oven with the 24 bolts and lockwashers (furnished) (6 per leg). Carefully raise oven to its normal position.

#### **Assembling Cabinet Base or Stand**

- 1. Screw two locating studs (found in cabinet base or stand carton) through the cabinet top flange or the stand base bottom into bottom of oven (Fig. 1).
- 2. Attach each of the four leg assemblies to the bottom of the stand with the 24 bolts and lockwashers (furnished) (6 per leg).

#### 3. Mount the oven on top of the stand or cabinet (Fig. 1).



#### Assembling the Chimney and Flue Extension

Remove the oven chimney and flue extension from the rear of the oven (motor compartment) and use the screws provided to fasten the chimney to the top rear of the oven. The flanges on the chimney are to be positioned under the top cover. Also attach the flue extension.

#### **Electrical Connections**

**WARNING:** ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE ANSI/NFPA70 (LATEST EDITION) AND/OR OTHER LOCAL ELECTRICAL CODES.

**WARNING:** DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH TO INDICATE THAT YOU ARE WORKING ON THE CIRCUIT.

Remove the wiring compartment cover on the front of the oven. Remove the appropriate knockout on the bottom of the oven and attach the power supply conduit to the bottom of the oven.

Comply with the appropriate wiring diagram (included with this manual) when making connections to the electrical supply lines.

Replace the wiring compartment cover and turn on the power supply.

#### **ELECTRICAL DATA**

		2	208-240	V		480V	NOMINAL AMPERES PER LINE WI				VIRE								
	TOTAL	3-PHA	SE LO	ADING	3-PHA	3-PHASE LOADING			3-PHASE								1-PHASE		
	KW	KWI	PER PI	IASE	KW	PER PH	IASE		208V		240V 480V			480V		480V			
		L1-L2	L2-L3	L1-L3	L1-L2	L2-L3	L1-L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	208V	240V	480V
Single Oven	11	3.35	3.35	4.30	3.33	3.33	4.33	32.0	27.9	32.0	27.7	24.2	27.7	13.9	12.0	13.9	52.8	45.8	22.9
Stacked Oven	22	6.70	6.70	8.60	6.66	6.66	8.66	64.0	55.8	64.0	55.4	48.4	55.4	27.8	24.0	27.8	105.6	91.6	45.8

The 208, 240, and 480 volt ovens covered by this manual are for connection to a 1- or 3-phase power system. Ovens leaving the factory are wired for connection to a 3-phase power system. Wires can be changed at the installation site for connection to a 1-phase power system by altering the wiring at the terminal block.

#### **LEVELING**

Adjust the legs to ensure that the oven racks are level in the final installed position.

#### **CASTERS**

If the oven is to be installed on casters, assemble the casters to the legs provided. Place the locking casters on the front legs and non-locking casters on the rear legs.

#### **ASSEMBLING STACKED OVENS**

- 1. Unpack the ovens and stack kit. Position one oven on its back for access to the oven bottom, taking care not to scratch or damage it. Attach the four leg assemblies with the 24 bolts and lockwashers (furnished) (6 per leg).
- 2. Place lower oven (with legs) on floor and remove two <sup>7</sup>/<sub>16</sub>" (11.1 mm) diameter knockouts on each side of top cover plus the 13/8" (35 mm) diameter knockout at the right front of the top cover.
- 3. Install the two locating studs (included in leg stack set) into screw plates on underside of upper oven (Fig. 2).
- 4. Remove oven chimneys stored at the rear of both ovens. Discard one chimney. Attach the remaining chimney to the top of the upper oven (oven without legs) (Fig. 3). The flanges on the chimney are to be positioned under the top cover.
- 5. Move the oven with legs to the installed position and place the upper oven on top of the lower oven using the locating studs. Remove the wiring compartment cover from the front of both ovens. This will facilitate routing the power leads (furnished) to the top oven, as well as attaching the 1" (25.4 mm) conduit nipple and locknut (furnished).
- 6. Attach the short flue extension over the exhaust vent at the rear of the upper oven. Slide the long flue extension tube over the exhaust vent at the rear of the lower oven (Fig. 3). These extensions should direct the exhaust fumes upward through and above the top oven.
- 7. Place the 1" (25.4 mm) conduit nipple through the 13/8" (35 mm) hole in the bottom of the top oven and the top of the bottom oven and clamp the two ovens together with the locknut from the underside.

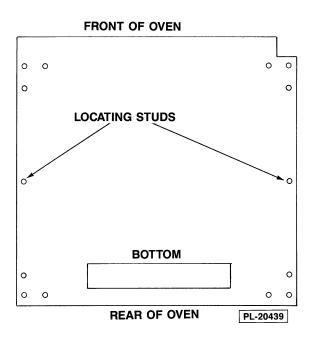


Fig. 2

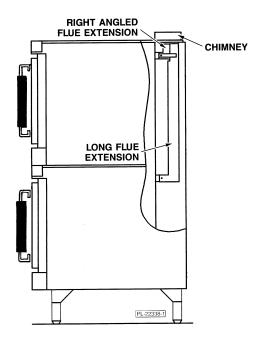


Fig. 3

#### **Electrical Connections**

**WARNING:** ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

**WARNING:** DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH TO INDICATE THAT YOU ARE WORKING ON THE CIRCUIT.

Ensure that the electrical power supply agrees with the specifications on the oven data plate and complies with the wiring diagram on the oven.

- Attach the power leads (furnished as part of the stack set) to the line side of the terminal block of the upper oven. Then carefully route these leads down through the conduit nipple and behind the control panel of the lower oven.
- 2. Attach these leads to the lower oven terminal block per the wiring diagram. At the same time, attach the power supply conduit to the bottom of the lower oven. Also attach the power supply leads to the line side of the terminal block.
- 3. Finally, inspect and check all wiring and terminal connections for tightness and proper routing away from any moving parts (relay solenoid core), or pinch points (cover on oven frame). Then carefully replace the oven control panel for both ovens.

Refer to Electrical Data chart on page 5.

#### **LEVELING**

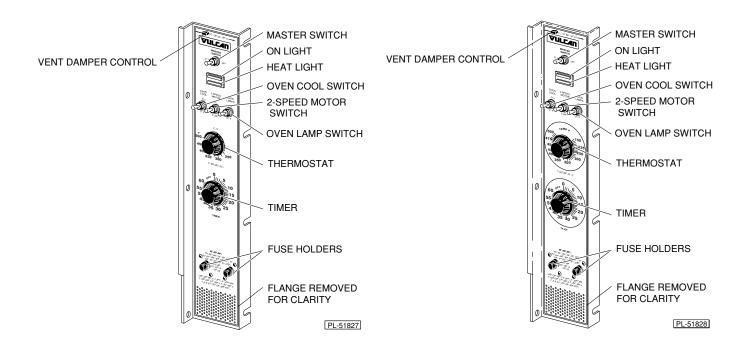
Adjust the legs to ensure that the oven racks are level in the final installed position by turning the bottom hex tips on the floor.

#### **CASTERS**

If the stacked ovens are to be installed on casters, assemble the casters to the legs provided. Place the locking casters on the front legs and non-locking casters on the rear legs.

# **OPERATION**

#### CONTROLS — MODELS ECO4S AND ECO4D/ECO6D OVENS (Fig. 3)



#### **MODEL ECO4S**

#### **MODEL ECO4D/ECO6D**

Fig. 3

MASTER SWITCH	_	ON — turns oven control circuits on. OFF — turns oven control circuits off.
OVEN COOL SWITCH	_	Allows the fan motor to run with the doors ajar to speed oven cooling.
OVEN LAMP SWITCH	_	Turns lights in the oven on or off.
THERMOSTAT	_	Controls oven temperature during cooking operation.
TIMER	_	Use to set cooking cycle time. Alarm sounds continuously when elapsed time counts down to 0; oven does not turn off. Turn timer to OFF position to stop alarm. When oven is not in use, keep timer at OFF position.
ON LIGHT (Amber)	_	Lit when Master Switch is positioned at ON.
HEAT LIGHT (White)	_	Comes on and goes off when the heating elements cycle on and off.

2-SPEED MOTOR — LO / HI — Adjusts air velocity in the oven. Use the HI setting as the usual operating speed and the LO setting for delicate product like meringue which might be blown around in the oven.

FUSE HOLDERS — Replace fuses with appropriate type described on control panel.

MOISTURE VENT DAMPER — Located to the upper left of the control panel. Open the damper in order to exhaust excess moisture caused by cooking products with a high moisture content. Close damper when dry products are being cooked. Settings between OPEN and CLOSED permit selection for the best performance.

#### **BEFORE FIRST USE**

Before using the oven for the first time, it must be "burned in" to release any odors that might result from heating the new surfaces in the chamber.

- 1. Using a clean damp cloth, wipe the inside of the oven, including the racks.
- 2. Close the oven doors, turn the Master Switch ON, turn the Thermostat to 300°F (149°C) and allow the oven to cycle for 6 to 8 hours before turning the Master Switch OFF.

#### USING THE ECO4S AND ECO4D/ECO6D OVENS

#### **Preheating**

- 1. Turn Master Switch ON. Amber ON light will come on, indicating that power to oven is on.
- 2. Set Thermostat as desired. Refer to COOKING GUIDELINES for suggested temperatures and times for various products.
- 3. Prepare product and place in suitable pans. When white HEAT light goes off, oven has reached desired preheat temperature.

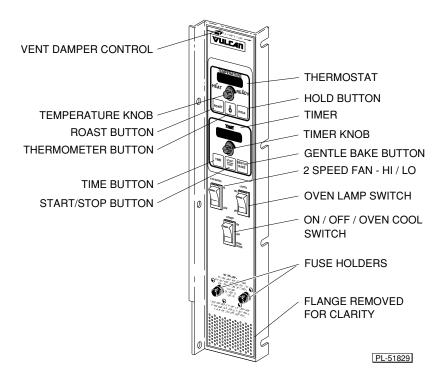
#### Cooking

- 1. Open doors and load the product into the oven. Place pans in the center of the racks. Close doors.
- Set the Timer. After the preset time lapses, turn timer to OFF position to stop alarm.
- 3. When product is done, open doors and carefully remove cooked product from the oven. Wipe up any spills.

#### **End of Day**

- 1. Turn thermostat to OFF.
- 2. Turn Oven Cool Switch ON. Leave door ajar while the fan is on to cool the oven.
- 3. When oven has cooled sufficiently, turn Oven Cool Switch and Master Switch to OFF and clean the oven.

#### CONTROLS — MODEL ECO4C/ECO6C OVENS (Fig. 4)



#### **MODEL ECO4C/ECO6C**

Fig. 4

#### THERMOSTAT CONTROL

#### Temperature Display (When Not Timing Product)

Displays set cook temperature while the light in the Roast Button is lit. Will be overridden to display actual cavity temperature for 8 seconds when Thermometer Button is pushed.

- 1. The light in the Thermometer Button will be lit while the actual temperature is being displayed.
- 2. The light in the Thermometer Button will extinguish when the display returns to set temperature display.

#### **Temperature Display (When Timing Product)**

Displays set hold temperature while the light in the Hold button is lit. Displays the roast temperature when the Roast button is lit. Will be overridden to display actual cavity temperature for 8 seconds when the Thermometer Button is pushed.

- 1. The light in the Thermometer Button will be lit while actual temperature is being displayed.
- 2. The light in the Thermometer Button will extinguish when the display returns to set temperature display.

#### **Temperature Knob (When Not Timing Product)**

- 1. Sets the roast temperature when the Roast Button light is lit. The Roast Button light can be turned on by pressing the Roast Button.
- 2. Sets the hold temperature when the Hold Button light is lit. The Hold Button light can be turned on by pressing the Hold Button.

#### Temperature Knob (When Timing Product)

- 1. Sets the roast temperature when the Roast Button light is lit. The Roast Button light cannot be changed by pressing the Roast Button.
- 2. Sets the hold temperature when the Hold Button light is lit. The Hold Button light cannot be changed by pressing the Hold Button.

#### Roast Button Light (If On) - (While Not Timing Product)

Indicates the roast mode is selected. This means:

- 1. The displayed temperature settings will be for the roast temperature except for the time that the light in the Thermometer Button is lit.
- 2. Rotating the Thermostat Knob will change the roast set temperature.
- 3. Cook time can be adjusted using the Timer Knob.
- 4. The time displayed is the initial set cook time.
- 5. It is possible to select the Hold mode using the Hold Button.

#### Roast Button Light (If On) - (While Timing Product)

Indicates the roast mode is selected. This means:

- 1. The displayed temperature settings will be for the roast temperature except for the time that the light in the Thermometer Button is lit.
- 2. Rotating the Temperature Knob will change the roast set temperature.
- 3. It is not possible to select the Hold mode using the Hold Button.
- 4. The time displayed is the time counted down from the initial cook time set.

#### **Roast Button**

- 1. Lights the Roast Button light. See Roast Button Light above.
- 2. Selects the Roast mode.
- 3. Has no effect if timing in the Hold mode.

#### **Thermometer Button**

When pressed, causes actual cavity temperature to display for about 8 seconds, then display returns to set temperature.

#### Heat Light

When lit, indicates that power is being supplied to the heating elements.

#### **Ready Light**

Will be lit any time the actual temperature is within  $\pm 7^{\circ}$  F ( $\pm 7^{\circ}$ C) of the set temperature for the current mode.

#### **TIMER CONTROL**

#### **Time Display (While Not Timing Product)**

Displays the set cook time if the light in the Roast Button is lit.

#### **Time Display (While Timing Product)**

- 1. Displays the counted down cook time if the Roast Button light is lit and in the Roast mode.
- Displays the counted up hold time if the Hold Button light is lit and in the Hold mode. Count-up of hold time does not begin until cavity temperature reaches the hold temperature.

#### Time Display Semicolon

- 1. Flashing if product is timing.
- 2. Not flashing if not timing product.

#### **Time Button**

Press to set cooking cycle time.

#### **Time Button Light**

Illuminates when the Time Button is pressed.

#### **Timer Knob**

Sets the cook time when not already timing and the Cook Time indicator is lit.

#### **Gentle Bake Button**

Selects the gentle bake time setting. A roast time must be set first. The gentle bake time can then be set equal to or less than the roast time. The gentle bake time will be the portion of roast time to operate in the gentle bake mode. Gentle bake mode will start first. When gentle bake time elapses, the remainder of the roast time will be in the non-gentle bake mode.

Use when cooking delicate product, such as strudel, muffins, cupcakes, meringue pies, etc., to keep product from forming "waves" on the top.

Use the Gentle Bake Button to switch between the selection of gentle bake mode and no gentle bake mode time setting. A gentle bake mode time of zero means no gentle bake mode will occur.

The light in the Gentle Bake Button will be lit when in the gentle bake mode.

In Gentle Bake Mode:

- 1. The fan cycles (45 seconds ON and 45 seconds OFF) for the duration of the gentle bake cycle time.
- 2. The fan stays on while the heat cycles in hold mode.
- 3. The fan stays on while heat cycles at 100% power when not timing.
- 4. Can be switched at any time.

#### Stop/Start Button

- 1. Initiates timing a product in the mode selected if a cook time has been set.
- 2. Stops timing of a product if a timing sequence has already started.

#### **Hold Button**

Selects Hold mode.

- 1. Allows selection of hold temperature.
- 2. Temperature indication of ---°F (---°C) indicates no hold mode.

#### **Hold Button Light**

Is lit when in the Hold mode.

- 1. When not timing, allows setting/enabling a hold mode setting of ---°F (---°C), meaning no hold will take effect.
- 2. Any other temperature means that when the actual cook time has ended, the oven will enter the Hold mode and use the hold temperature.

#### TWO-SPEED FAN SWITCH

Adjusts air velocity in the oven.

#### **OVEN LAMP SWITCH**

Turns lights in the oven on or off.

#### ON / OFF / OVEN COOL SWITCH

- 1. ON turns oven control circuits on.
- 2. OFF turns oven control circuits off.
- 3. OVEN COOL allows the fan motor to run with the doors ajar to speed oven cooling.

#### **FUSE HOLDERS**

Replace fuses with appropriate type described on control panel.

#### MOISTURE VENT DAMPER

Located to the upper left of the control panel. Open the damper in order to exhaust excess moisture caused by cooking products with a high moisture content. Close damper when dry products are being cooked. Settings between OPEN and CLOSED permit selection for the best performance.

#### **BEFORE FIRST USE**

Before using the oven for the first time, it must be "burned in" to release any odors that might result from heating the new surfaces in the chamber.

- 1. Using a clean damp cloth, wipe the inside of the oven, including the racks.
- 2. Close the oven doors, push the On/Off/Oven Cool switch to the ON position, turn the Thermostat to 300°F (149°C) and allow the oven to cycle for 6 to 8 hours before turning the On/Off/Oven Cool switch OFF.

#### USING THE ECO4C/ECO6C OVENS

#### **Preheating**

- 1. Turn On/Off/Oven Cool switch to ON position. The Heat light will come on, indicating that power to the oven is on.
- 2. Set Thermostat as desired. Refer to COOKING GUIDELINES for suggested temperatures and times for various products.
- 3. Prepare product and place in suitable pans. When Ready light comes on, oven has reached desired preheat temperature.

#### Cooking

- 1. Open doors and load the product into the oven. Place pans in the center of the racks. Close doors.
- Set Roast temperature and time. Set Hold temperature and Gentle Bake time, if desired. Gentle Bake time may not be more than roast time. Gentle Bake will cycle the fan during the set time at the beginning of the cooking cycle.
- 3. Press the Start/Stop button to start the cooking cycle.
- 4. At the end of the cooking cycle, the buzzer will sound continuously if the Hold mode is OFF. If the Hold mode is ON, there will be a short beep at the beginning of Second Stage Cooking (oven temperature will begin to decline to the Hold temperature), and a long beep (20 seconds) at the end of the cooking cycle. (See ROAST AND HOLD OPERATION.)
- 5. When product is done, open doors and carefully remove cooked product from the oven. Wipe up any spills.

#### **End of Day**

- 1. Push On/Off/Oven Cool switch to OVEN COOL. Leave door ajar while the fan is on to cool the oven.
- 2. When oven has cooled sufficiently, push On/Off/Oven Cool switch to OFF position and clean the oven.

#### ERROR MESSAGES — ECO4C/ECO6C OVENS

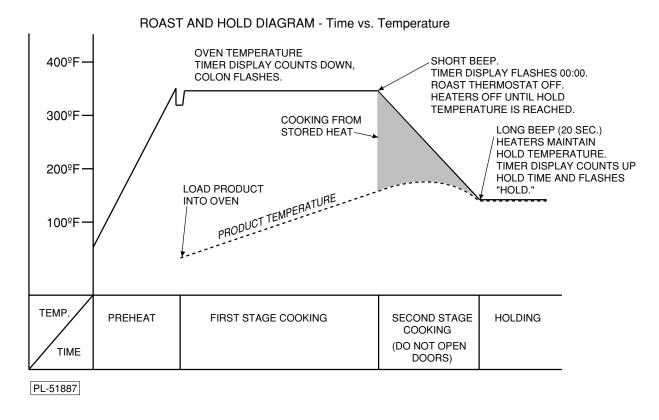
- E-01 High limit error. Contact your local Vulcan authorized service representative.
- E-02 Low limit error. Contact your local Vulcan authorized service representative.
- E-03 High ambient temperature (215°F/101.7°C). Contact your local Vulcan authorized service representative.
- E-04 Low ambient temperature (32°F/0°C). Let control warm up after cold storage.
- E-06 Thermocouple probe open. Contact your local Vulcan authorized service representative.

When calling for service, please advise what error code was displayed.

#### **ROAST AND HOLD OPERATION**

Roast and Hold cooks the product in two stages. During First Stage Cooking, the oven temperature is regulated by the Roast thermostat for the amount of time set on the Timer. After the lapsed time counts down to 00:00, Second Stage Cooking begins. During Second Stage Cooking, the heating elements are off as the temperature in the oven declines to the Hold Temperature. The doors should remain closed during Second Stage Cooking.

When the Hold temperature is reached, cooking is done. The Time Display counts up the Hold time and flashes "Hold." Temperature in the oven will be maintained at the Hold temperature until the oven is turned off.



#### **PROPER UTENSILS**

The use of proper utensils can enhance oven operation. Medium and light weight pans allow the product to warm faster. Roast meats in shallow pans deep enough to hold all juices yet allow free air circulation.

#### **OPERATING HINTS**

When using the convection oven for the first time with a particular food, check the degree of doneness periodically before the suggested time has elapsed, to make sure the desired doneness is achieved.

Record your temperature and time settings for various products. The convection oven can provide consistent, repeatable results.

The convection oven is faster than conventional deck-type ovens; temperature settings are lower and cook times are shorter. Since recipes and foods are subject to many variations and tastes, the guidelines regarding Times and Temperatures in this manual are SUGGESTIONS ONLY. Experiment with your food products to determine the cooking temperatures and times that give you the best results.

### COOKING GUIDELINES — MODELS ECO4S AND ECO4D/ECO6D OVENS

PRODUCT	TEMPERATURE °F (°C)	TIME (MIN.)	NUMBER OF RACKS		
BREAD PRODUCTS					
Bread (24, 1-lb. loaves) (454 gr.)	340 (171)	30	3 (every other rack		
Hamburger Rolls	300 (149)	15	starting with bottom rack) 5		
Corn Bread	335 (168)	25	5		
Yeast Rolls	325 (163)	25	5		
Baking Soda Biscuits	400 (204)	6	5		
PASTRIES					
Frozen Berry Pies (22 oz.) (624 gr.)	350 (177)	34	5 (30 pies)		
Frozen Fruit Pies (46 oz.) (1.3 kg)	350 (177)	45-50	5 (20 pies)		
Fresh Apple Pie (20 oz.) (567 gr.)	350-375 (177-190)	25-30	5 (30 pies)		
Sheet Cake (5 lb. per pan) (2.3 kg) Sugar Cookies	315 (157)	20-22	5		
Cherry Crisp	300 (149) 300 (149)	15 25	5 5		
Chocolate Cake	335 (168)	20	5		
Cinnamon Buns	335 (168)	20	5		
Brownies	350 (177)	15	5		
Danish	335 (168)	12	5		
Angel Cakes	250 (121)	25-30	3		
Cream Puffs	350 (177)	20-25	5		
Pumpkin Pie	300 (149)	30-35	5		
Fruit Cakes	275 (135)	70 15	3 5		
Apple Turnovers	350 (177)	15	5		
MEAT					
Hamburger Patties (5 per lb. [454 gr.] well done)	400 (204)	10-12	11 (264)		
Steamship Round (80 lb. quartered) (36 kg)	275 (135)	2 <sup>3</sup> / <sub>4</sub> hrs. (well done)	2 (2 pans ea. rack)		
Steamship Round (whole 60-80 lb.) (27-36 kg) Rolled Beef Roast (20 lb. avg.) (9 kg)	275 (135)	8 hrs. (med.) 4 hrs. (med.)	3 (2 roasts per pan)		
Prime Ribs	300 (149) 275 (135)	3 hrs. (med.)	2 (2 roasts per pan)		
Baked Stuffed Pork Chops	275 (135)	25-30	5		
Boned Veal Roast (15 lb.) (7 kg)	300 (149)	3 hrs., 10 min.	2		
Lamb Chops (small lean)	400 (204)	6	5 (24 per pan)		
Shell Steaks (10 oz.) (283 gr.)	450 (232)	7-8	5 (16-18 per pan)		
Meat Loaf	325 (163)	40-45	5 (2 pans per rack)		
FISH					
Fish Stix	335 (168)	16-18	11		
Baked Stuffed Shrimp	400 (204)	6-7	5		
Baked Stuffed Lobster (11/2 lb.) (680 gr.)	400 (204)	10	3		
Halibut Steaks (frozen 5 oz.) (142 gr.)	350 (177)	30	5		
FOWL					
Chicken Breast — Thigh	350 (177)	33-35	5		
Chicken Back — Wing	350 (177)	30-33	5		
Chicken (21/2 lb. quartered) (1 kg)	350 (177)	30 2 hrs. 45 min	5 (26 per pan)		
Turkey Rolled (18 lb. rolls) (8 kg)	310 (154)	3 hrs., 45 min.	3 (6 pan - 2 rolls ea. rack)		
OTHER			_		
Macaroni and Cheese	350 (177)	30	5		
Beef Pot Pies	400 (204)	30-35	5		
Turkey Pot Pies	400 (204)	30-35 15-20	5 3		
Stuffed Peppers Melted Cheese Sandwiches	350 (177) 400 (204)	15-20 10	5 (120)		
Pizza (7" frozen) (18 cm)	435 (224)	11	6		
Idaho Potatoes (120 count)	440 (227)	50	5		

Where the number of racks is 5, insert the first rack on the 2nd from bottom position and place the others on every other rung.

# TIMER SETTINGS FOR ROLLED BEEF ROASTS — MODEL ECO4C/ECO6C OVENS

ROAST TEMPERATURE	200°F	(93°C)	250°F	= (121°C)	300°F (149°C)			
HOLD TEMPERATURE	-	·	140°F	= (60°C)				
DONENESS	RARE	MEDIUM	RARE	MEDIUM	RARE	MEDIUM		
WEIGHT OF ROAST POUNDS	HOURS:MINUTES							
8	2:40	3:45	1:45	2:20	1:20	1:40		
9	2:50	3:58	1:50	2:25	1:25	1:50		
10	3:00	4:15	2:00	2:35	1:30	1:55		
11	3:10	4:25	2:05	2:45	1:35	2:00		
12	3:20	4:40	2:15	2:50	1:40	2:05		
13	3:30	4:50	2:20	3:00	1:45	2:15		
14	3:40	5:05	2:25	3:10	1:50	2:20		
15	3:45	5:15	2:30	3:15	1:55	2:25		
16	3:55	5:30	2:35	3:20	2:00	2:30		
17	4:00	5:40	2:40	3:30	2:00	2:35		
18	4:10	5:50	2:45	3:35	2:05	2:40		
19	4:15	6:00	2:50	3:40	2:10	2:45		
20	4:25	6:10	2:55	3:50	2:15	2:50		
21	4:30	6:20	3:00	3:55	2:15	2:55		
22	4:40	6:30	3:05	4:00	2:20	2:55		
23	4:45	6:40	3:10	4:05	2:25	3:00		
24	4:55	6:50	3:15	4:15	2:25	3:05		
25	5:00	7:00	3:20	4:20	2:30	3:10		
26	5:05	7:10	3:25	4:25	2:35	3:15		
27	5:15	7:20	3:30	4:30	2:35	3:20		
28	5:20	7:25	3:35	4:35	2:40	3:20		
29	5:25	7:35	3:35	4:40	2:45	3:25		
30	5:30	7:45	3:40	4:45	2:45	3:30		

#### **POWER OUTAGE**

In case of a power outage, the oven will automatically shut down. When power is restored to the lines, the oven will resume its normal operation. However, if the oven is to be left unattended during a power outage, push the master switch to the OFF position. When power is restored to the lines, push master switch to the ON position, wait for the oven to preheat, then resume normal cooking operations.

#### **CLEANING**

WARNING: TURN OVEN OFF AND DISCONNECT ELECTRICAL SUPPLY BEFORE CLEANING.

Clean outside of the oven daily by wiping with a clean damp cloth.

Clean porcelain oven interior daily with soap or detergent and water. Rinse thoroughly and wipe dry with a soft clean cloth.

#### **Optional Stainless Steel Oven Interior**

Soap or detergent and water usually handle routine cleaning. Rinse thoroughly, dry with a soft clean cloth.

For burned-on foods and grease which resist simple soap and water cleaning, an abrasive cleanser (scouring powder) mixed into a paste may be used. Apply with stainless steel wool or sponge, always rubbing with the "grain."

This treatment is equally effective for "heat tint" (slightly darkened areas caused by oxidation). Again, remember to rub in the direction of the polish lines. Rinse with clear water and dry with a soft cloth.

### **MAINTENANCE**

WARNING: TURN OVEN OFF AND UNPLUG POWER SUPPLY CORD BEFORE PERFORMING ANY MAINTENANCE.

The fan motor comes with sealed bearings and requires no lubrication.

Annually check the flue, when cool, to be sure it is free of obstructions.

#### **REPLACING LAMPS**

- · Allow oven to cool.
- · Remove all racks by pulling forward, lifting up and out.
- · Remove the right rack support by lifting up.
- Unscrew glass dome(s) from light body.
- Replace the bulb(s).
- Reassemble glass dome(s), rack support and racks by reversing the disassembly procedure.

#### **SERVICE AND PARTS INFORMATION**

To obtain service and parts information concerning your ECO Series Oven, contact the Vulcan-Hart Service Depot in your area (refer to listing supplied with this oven), or Vulcan-Hart Company Service Department at the address or phone number shown on the front cover of this manual.